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THE MUSHROOM GROWERS'
ASSOCIATION

MGA

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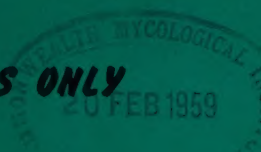
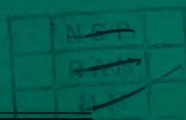
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No responsibility can be accepted by the Editor, the Editorial Board, or the Mushroom Growers' Association for statements made or views expressed in this Bulletin, or for any advertisements included in this publication.

EDITORIAL

YOUR FORUM

Most of us have from time to time attended annual meetings in connection with this and that and have, quite frankly, been bored to tears with the seemingly meaningless and endless pitter patter which far too often marks such occasions. The amount and the quality of such exercises almost invariably marks the quality of the organisation and the business in hand.

Most fortunately the MGA's annual "get together", far from providing discussion of the pitter patter type, has always evoked the most stimulating of discussions between members and it certainly appears that this 1959 meeting will not prove an exception.

The Connaught Rooms on 24th March will provide an excellent opportunity for members to air their views on such matters as seem to demand their special attention. It is an opportunity for even the smallest grower to get on his feet and say what he thinks. It is an opportunity for those growers who, often dwelling in the wilderness and feeling neglected, to say so and to expound their theories on how this and that in the affairs of this Association can be improved. It is an opportunity—all too rare many think—for the rank and file members, the backbone of the industry, to meet members of the Executive Committee. If you have a grouse, well grouse it out loud for all to hear; if you have a compliment to pay, then pay it publicly, and if you have any suggestions to make, make them. Don't wait until the meeting is over and go into a huddle with a friend and say, "Now, what really ought to happen is . . ." and so on.

This is your forum—your opportunity to talk about what is, after all, your business. Don't neglect it. **WRA**

ANNUAL MEETING AND LUNCHEON DETAILS

The Annual General Meeting of the Mushroom Growers' Association and the Annual Mushroom Lunch, takes place at The Connaught Rooms, Great Queen Street, Kingsway, London (nearest underground station Holborn) on Tuesday, 24th March, with Sir William Slater, K.B.E., Secretary of the Agricultural Research Council, as Guest of Honour at the lunch. Sir William, who has for many years been a good friend to mushroom growers, may be sure of a very warm welcome.

Many members will no doubt recall that the time allotted for the annual meeting last year proved insufficient and an adjourned meeting was subsequently held. To avoid any such happening this year the Executive Committee has agreed to the following programme:—

Chairman's Reception	11 a.m.
Annual Luncheon	12 noon.
Annual Meeting	1.30 p.m.

As a further safeguard to ensure that there is plenty of time for discussion, the room in which the meeting takes place has been taken until 6.30 p.m.

In due course members will receive official notification of the meeting together with an application form for luncheon tickets. These tickets will be available at 25/- each and members can, if they wish, bring guests to the luncheon. The subsequent proceedings will, of course, be for members only.

The MGA Executive hope that as many members as possible will attend both the luncheon and the annual meeting. The latter is noted for its informed and lively discussion and the proceedings may well be livelier than ever this year.



SOMERSET FARM WALK

An area meeting and farm walk will take place at Wrington Vale Nurseries, Congresbury, Somerset, on Tuesday, 3rd March, at 2.30 p.m.

At the Wrington Vale Nurseries Mr. G. C. Griffiths, member of the MGA Executive, has over 126,000 sq. feet. of mushroom beds and his mushroom farm is therefore one of the largest in the country. His apprenticeship in mushroom growing started in 1937, and Mr. Griffiths has been growing mushrooms on his own since 1947. He favours the tray system.

MGA members in Area F (Hampshire, Gloucester, Wilts., Dorset, Somerset, Devon, Cornwall and Berks.), will receive individual notification of this farm walk together with special return form, but members outside the area concerned, are asked to **notify the MGA Secretary by 25th February**, if they intend to be present and the number of their party. Members, their wives, foremen, etc., can attend.

Arrangements will be made with regard to tea and there will be a general meeting afterwards.

WORLD'S PRESS DIGEST

Mushrooms are a little easier ; this period before Christmas is usually dull. (*Grower*, December 13/58.) Mushroom inquiry is weaker with a larger weight of supplies, added to which are some pickings of poorer quality than of late. *Fruit Trades Journal*, December 13/58. The mushroom trade was described in one word: Glut! (*Nurseryman Seedsman*, December 18/58). In spite of increased demands, there were still too many mushrooms about. (*Nurseryman Seedsman*, Dec. 25/58).

With the rapid and widespread expansion of mushroom growing in the Netherlands comes the risk of fungal and insect pests. Most pathogens succumb to steam disinfection of the houses as practised in Canada, where a current of 1-3 atmospheres pressure is supplemented by 1-2 gall. 40% formalin/10,000 cu. ft. Within 3 hours the temperature of the house rises to 50-65° C., which is maintained for 1 hour, followed by closing for at least 12 hours before emptying. Just before starting a new crop after 4-5 days the house is again steamed out but without formalin.

Dr. H. C. Bels-Koning & Dr. P. J. Bels in *Meded Dir. Tuinb.*, 20, 8-9, 1957.

Formulas containing only pyrethrum synergized with Piperonyl Butoxide, at concentrations which gave good results against non-resistant house flies, also gave good results against the resistant strain at no increase in concentration or dosage rate.

H. O. Schroeder & H. A. Jones in *Soap & Chemical Specialities*, Dec./57.

The only means by which we are able to transmit Mummy Disease is by placing sections of soil or compost from infested beds into normally producing beds. Chopping, grinding or breaking up the sections destroys the infective agent. Evidently the mycelium in the sections must be transferred in a condition capable of resuming growth when placed in the normal beds.

Chester Gibson of Pennsylvania State University in *AMI's Mushroom News*, December/58.

An absorber for removing excess carbon dioxide from controlled-atmosphere storage rooms is described, consisting of a tower containing 5 cu. ft. of 1 in. saddle packing over which liquid charged with caustic soda is pumped from a 100-gal. reservoir. Storage room air, circulating from a centrifugal fan, enters the tower beneath the packing at a point just above the reservoir level, passes up through the packing, and back into the room. The equipment may be located away from the storage room. I. J. Pflug, D. H. Dewey & M. H. Brandt in *Quarterly Bulletin Michigan Agriculture Experiment Station*, 40, 1957.

Smooth-running, easily constructed conveyors without rollers can now be made from components marketed by Dexion Ltd., 67

Maygrove Road, London, N.W.6., i.e., "Dexion" slotted angle, "Gliderwheels" and punched strap.

Farm Implements and Machinery Review, December 1/58.

At King's School, Sharborne Park, Northleach, Gloucestershire, we try to develop as many sides of true education as possible and, of course, marry them together. Among other things we produce a considerable area of mushrooms, spawned in boxes, and the boys do practically the whole of the work from first composting to final picking. They do this in their spare time. You can see immediately how this kind of thing can help with biology in the laboratory and *vice versa*.

J. H. Mosey (headmaster) in *New Scientist*, December 25/58.

Trojan Limited of Croydon, famous for their diesel vans, enter the agricultural field with an aerater suitable for potato and other root stores where an intermittent cold or hot blow is required. A mobile machine, it incorporates a power take-off. *Grower*, December 12/58.

It does not take much of an extra yield to refund more than the cost of activators, if judiciously used; and if a grower goes to all the trouble of composting, peak heating, filling and all the rest, he is well advised to take that very little extra trouble.

Robert Patterson in *Commercial Grower*, December 19/58.

"If we are to make use of the latest marketing and distribution techniques now being employed in the highly developed manufacturing industries, certain changes in our approach to marketing are essential", said Mr. J. K. Knowles, General Secretary of the NFU, at Stamford. "Modern retailing is making increasing demands for constant flows of graded and suitably packed produce."

Fruit Trades' Journal, December 13/58.

Major A. L. A. Dredge sends us a strong complaint about Covent Garden market being closed on Saturday, 27th December. "Surely it is a very shortsighted policy to allow the largest horticultural market in the world to remain closed for four days running? It would be simple for growers to get together and deliver direct to many restaurants, thereby by-passing Covent Garden". *Grower*, January 3/59.

Cancers are disorders of cell growth. They are manifestations of uncontrolled growth. Somehow, malignant cells have escaped from the control exercised by the mechanisms which normally precisely regulate growth. John Prince in *Daily Telegraph*, January 12/59.

Damage to mushrooms by Tarsonemid mites was noted on a farm in Kent in August, 1956. This is believed to be the first British record. Occasional mushrooms scattered throughout crops in several houses were affected, the bases of the stipes being brown and largely devoid of mycelium attachments, similar in appearance to damage attributed to *Linopodes antennaeipes*. The mites were swarming in large numbers over the brown areas, and in a few cases the entire mushroom was brown. The compost had been pasteurized at 130-140° F. before

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spawning, and was cased with a 50 : 50 mixture of chalk and sphagnum peat. The beds had been treated with nicotine, diazinon, and malathion aerosols, and derris/pyrethrum dusts, with apparently little effect on the mites. B. D. Moreton in *Plant Pathology*, December/58.

A "mood regulator" is claimed to improve both mood and physical condition. This new drug, Tofranil, is the result of research by the Geigy organisation. *Daily Telegraph*, January 7/59.



CORRESPONDENCE

As probably one of the few Mushroom Growers who have had experience on both sides of the Atlantic in mushroom growing commercially, I would like to add my "two cents" worth on Dr. Kneebone.

Disregarding Mr. Scrimgeour's reason for his letter and 'whoever said it first', Dr. Kneebone is worth anybody's time to listen to him.

Since I have been in the U.S.A. it has been my privilege to meet Leon Kneebone many times. His grasp of his subject (and Heaven knows we need men who have this grasp), and his ability to put his subject in language which even the layman can understand, merits the closest attention by all who may have the opportunity to hear him. Added to this, his friendly manner and willingness to help at all times set him above petty arguments.

As an Englishman who has benefitted by contacts with Dr. Kneebone, and is happy to list him as a friend, I would have thought that everybody would have been anxious to hear his views, even if they did contain a repetition, and therefore a confirmation, of what Mr. Wood said seven years ago.

For my part I can listen to Dr. Kneebone any time and benefit thereby.

Ronald A. Dyke.

Indiana Mushroom Corp., West Terre Haute.



HURRY UP

All members have been notified of preliminary arrangements in connection with the United Kingdom party which is to attend the 4th International Congress on Mushroom Science at Copenhagen from 18th to 26th July.

The MGA Secretary has been informed that if accommodation is to be guaranteed—this applies to both hotel and travel arrangements—it is **absolutely essential** that exact numbers be given as soon as possible. The position with regard to travel and accommodation has been much aggravated by the intense publicity campaign urging people to take holidays abroad this year. If you are intending to make the trip with the MGA party—**will you please inform the MGA Secretary immediately and certainly not later than 20th February.**

MIXED SPAWNING

By E. Hauser and J. W. Sinden

(*Champignon-Laboratorium Gossau-Zurich*)

Research work on spawning methods was started in our laboratories in 1950. It was based on the idea of impregnating the compost with grain spawn. In a long series of tests first in our research laboratory and later under the conditions of our commercial mushroom operation, the effect of mixed spawning was studied and compared with the conventional spawning methods used at that time.

Soon it became evident that mixing the spawn with the compost influenced critical phases of the mushroom growing process, such as the period between spawning, casing and picking, the cropping speed and the total amount of mushrooms produced.

Another line of investigation was pursued at the same time to study the effect of using **different amounts of spawn**. With the conventional spawning methods the reactions were only minor. With mixed spawning however, the total yield increased proportionally to the amount of spawn used, the periods between spawning, casing and picking being considerably reduced. A report on some of these experiments will be given later as only the economic aspects of mixed spawning are discussed here.

When it was evident that mixed spawning became commercially interesting, a machine was developed and built in our workshop in order to make the new process industrially efficient. This machine proved to be very satisfactory not only for mixed spawning with different amounts of spawn, but also for mechanical casing.

When mixed spawning with our machine had become a successful routine operation in our own mushroom plant, the new spawning method was introduced into those mushroom nurseries working under our technical guidance, where to-day our machines are also used. Last year one of the biggest American mushroom farms also took up the mixed spawning method for its commercial mushroom growing. To-day about 20 million lb. of mushrooms are being grown by this method.

Experience in these plants has proved that there are considerable economic and technical advantages in mixed and increased spawning. The most valuable results are increased yield and saving of time, which make it possible to increase the capacity of the plant by 20% or more with only relatively small investments and costs. Besides this, mixed spawning with or without increased amounts of grain spawn can be a weapon in the battle against pests and weed-moulds which may invade the compost before the mycelium has a chance to fill the bed. At the spawning rate now generally used for mixed spawning of about 25 to 31 sq. ft. of bed surface per carton*, the compost of a 5 to 6 in. deep bed is impregnated with 600 to 700 grains per sq. ft. of bed surface or 1 grain per cubic inch, all these being initial points of growth. In this way the compost is filled with mycelium and ready for casing in 8 or 10 days if the bed is kept at optimum temperature.

Spawning with the machine does not merely mean saving of labour and standardization of the spawning process; it also levels out variations in the compost in the tray by mixing the compost thoroughly. At the same time close inspection of the compost is possible (e.g., for ammonia and moisture) and enables us to add water or gypsum. Besides this, more or less compost can be filled into the tray and the layer can be levelled out if necessary.

The full value of the mixed spawning operation can be achieved in a tray plant if the spawned trays are brought into special growing rooms, an innovation we introduced several years ago in our own as well as in other plants. In such rooms the temperature can be economically kept at an optimum for spawn growth, since little fresh air is required; at the same time the sanitation can be carefully supervised.

Growers who use mixed spawning to-day consider the new spawning method not merely as a new working technique but as a real step to progress in the art and economy of mushroom growing.

*One of our standard cartons "SINDEN PROCESS GRAIN SPAWN" contains 600 grams or 1 litre of grain spawn, comprising 20,000 to 25,000 grains.

WIVES' CHAMPION?

(As introduced already by C. R. Rasmussen
From Denmark (land of Hans Christian Andussen),
Our own Calypsoist now poses as songstress
To boost this Fourth International Congress.)
Ye Wives! Ye wives of mushroom growers all!
Your armour on and hustle to the Suffrage call!
Your husband's love of self, you shall cool it in
Page Four-Seven-One in December's Bulletin.
Thus reading may his selfishness be changed!
Here shall he find excursions so arranged
(If sufficient non-participating ladies)
That wives may also have their gay-days.
While he is viewing Rasmussen's useful grunt-pigs
His wife will view the lovely Church of Grundtvigs;
But if he holidays alone, you can perhaps,
Have revenge, when returning he shows you snaps.
For you accusingly can ask "Is that you
Prostrate beside the Little Mermaid Statue?"
Yes, Wives! What Mushroom Grower worth his salt, in honour
Could deny his wife her share of Sterling changed to Kroner?

F.P.

FANCY THAT!

Whoa!

After the B.B.C's Workers' Playtime broadcast from the mushroom farm of A. G. Linfield Ltd., at Thakeham, Sussex, on 7th January, the artists had lunch at "The Horse & Groom", Patching, where every table in the hotel's aptly named Manger Grill is in the form of a loose horse box. Name of Alma Cogan's box? "The Old Grey Mare".

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SIR WILLIAM SLATER, K.B.E., D.Sc., F.R.I.C., F.R.S.



Sir William Slater, K.B.E., D.Sc., F.R.I.C., F.R.S., who is to be the Guest of Honour at the Annual Luncheon of the MGA at The Connaught Rooms on 24th March has always evinced the keenest interest in the well-being of this Association and, as Dr. Slater, he was Guest of Honour at the 1950 Annual Luncheon.

Sir William has had a distinguished career. He graduated at Manchester with 1st Class Honours in Chemistry (Graduate Scholar) and was subsequently engaged on research with Professor A. Lapworth in organic chemistry (M.Sc.—Beyer Fellowship).

Before spending two years in industry he was Assistant Lecturer in Chemistry at Manchester where he published papers in organic chemistry.

It was to Manchester University that he returned from industry, to work in biochemistry under Prof. A. V. Hill in the Department of Physiology, a move not at all surprising to his many friends since he had always been attracted to biological applications of chemistry.

In 1923 he was awarded the Beit Memorial Medical Research Fellowship, followed in 1926 by the Intermediate Beit Fellowship and in 1927 the Senior Beit Fellowship. Earlier (in 1924) he had followed Prof. Hill to University College, London, and in 1926, he gained the D.Sc. (Manchester).

Thirty years ago he went to Dartington Hall as advisor to the Trustees on scientific problems arising from the development of rural estate for agriculture and other related industries. Later he was in charge of all agricultural and rural development on the estate and established a laboratory there which carried out a number of applied researches.

It was in 1943 that Sir William joined the Ministry of Agriculture

to act as Secretary of the Agricultural Improvement Council, which had just been set up. He was responsible for the steady development of this Council's work and, in particular, its relationship with the Agricultural Research Council. Later, as Senior Advisory Officer in the Ministry, he was responsible for setting up the Specialist Scientific Section of the Advisory Service.

In 1949 he was appointed Secretary to the Agricultural Research Council. Since then the expenditure on agricultural research has quadrupled and the status of the Council has been raised by the output of good work, not only in the field of applied science but also the fundamental work on which the applied work must be based.

B.B.C. AT MUSHROOM FARM

Workers' Playtime Broadcast



The B.B.C's Workers' Playtime broadcast on 7th January came from the Thakeham nurseries of A. G. Linfield Ltd.

Topping the bill was Alma Cogan, a picture of whom is reproduced here by kind permission of the Brighton *Evening Argus*.

Cardew "The Cad" Robinson appeared on the same programme.

One of a number of Italian girls employed by Messrs. Linfield as mushroom pickers, 26 year old Teresa Ninno, presented Miss Cogan with a bouquet of flowers and a panier of mushrooms.



WHITE QUEEN LTD.

Research on mushroom spawn strains and strain maintenance is to be financed and directed by a handful of mushroom growers in Great Britain.

Growers talk incessantly about their problems, successes and failures; with their closer friends they have been known to compare records, techniques and even balance-sheets. For a number of years certain well-known personalities in the mushroom industry in Great Britain have been taking this co-operation a stage further by carrying out identical experiments simultaneously on their several farms, in order to obtain results sooner than might otherwise be possible.

Last year it became manifest that the direction of these and consequential activities could usefully be centralized. The old-established company of White Queen Ltd. was taken over and premises at Yaxley were acquired. A pure-culture laboratory was built and equipped, along with sub-micron-filtered air-conditioned inoculation and incubation rooms. Staff were engaged and are now concentrating on the production of experimental mushroom spawns.

Almost completed are six spawn-trial rooms where strains will be evaluated for productivity, quality, resistance to disease, stability, etc. Simultaneously the Directors on their own farms will carry out comparable trials under commercial conditions.

In order to finance a long-term research programme a commercially economic quantity of spawn has to be produced. It will be purchased by the Directors at a price including the MGA publicity contribution of 6d. per carton or carton equivalent.

Although White Queen Ltd. is a private company these details are being published because, since the Directors are prominent members of the Mushroom Growers' Association, the story has got around that the MGA is sponsoring White Queen Ltd., the suggestion being that any such action would be improper or at any rate likely to cause a rift between the growers and the spawn industry. The argument does not in fact arise, since there is no sponsorship, either direct or indirect.

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COMMERCIAL PREPACKING

By *Major A. L. A. DREDGE

At the opening of the first International Prepacking Exhibition at the New Horticultural Hall, Westminster, on 7th October this year, the Parliamentary Secretary to the Board of Trade stated:—"A new industry, which has begun to develop on a large scale in this country and in Europe only in the last few years, is now able to put itself on show—to what good effect we only need look round this building to see As ways of living change so new techniques are developed. The horticultural industry is keeping up with the times. New methods of retail selling and changes in consumers' habits have opened up new outlets. Pre-packing is one of the ways in which they can be exploited."

The main "new outlets" are self-service stores which are growing in numbers, like mushrooms, almost daily all over the country. Unfortunately, as yet, there are very few prepacked mushrooms on sale in these stores since most growers, though agreeing with prepackaging in theory for the future, have done little in practice at present.

One of the main original difficulties was the supply of packing material. Bowater-Eburite manufacture excellent blue or green $\frac{1}{2}$ lb. cartons with a cellulose acetate transparent window and a light cardboard outer container which travels well and is very convenient for display.



A Hartmann Fibre $\frac{1}{2}$ lb. prepack.

*Major Dredge is a Member of the Council of Produce Prepackaging Development Association.

MORE MUSHROOMS PER SQUARE FOOT!

January 2nd, 1959

The house in question was planted on August 27th, and the first pick was on September 29th. The house is of 1,030 sq. ft.

In eleven weeks from the first pick it had produced 5,261 lbs. or 5.10 lbs. sq. ft., and as we wished to avoid composting over the Christmas period, it was allowed to run a fortnight longer than usual whereupon the ultimate figures were 5,775 lbs., or 5.60 lbs. sq. ft.

It is possible that these figures (which include stalks) may not be believed by some but I assure you that they are quite accurate and truthful, and you are welcome to examine my records if you wish.

In support of the above, the figures of the remaining five houses (all planted with 100% Spawn) which are in crop at the moment, are as follows:-

11 weeks	-	3.93	lbs.	sq.	ft.
9 "	-	3.64	"	"	"
7 "	-	3.24	"	"	"
2 "	-	1.92	"	"	"
1 "	-	.81	"	"	"

The Original letter can be inspected at our Head Office in Worthing

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QUALITY AND
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MANURE & GRAIN**

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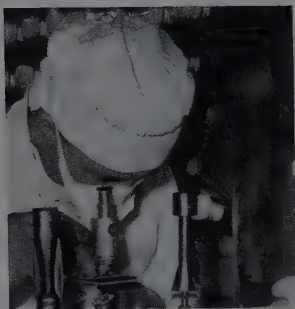
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The total extra cost is approximately 6d. per lb. more than the normal packing in chip baskets. At Combe Bank Market Gardens Ltd., we have been prepacking in these cartons for three years and there is a small but steady demand at Covent Garden. Most of the trays are bought by well-known London stores for their Food Departments.

We have also carried out extensive experiments with $\frac{1}{4}$ lb. packs which are much more popular. Unfortunately a pack similar to the Bowater-Eburite $\frac{1}{2}$ lb. carton is ruled out on account of the high cost. We therefore tried out the Hartmann tray which is inexpensive, easy to procure and neat to look at but it presented considerable carriage difficulties. With the aid of the New Merton Board Mills Company, a strong cardboard outer container was designed, the $\frac{1}{4}$ lb. Hartmann trays being packed sideways, giving a concertina effect. These outers stood up to rough handling and now take the packs to retailers in excellent condition via Covent Garden.

Several retailers at the International Prepacking Exhibition asked if we could not design another outer which could also be used for display. Once again the New Merton Board Mills came to the rescue. The photo shows the attractive double-layer cardboard tray which stands up well to railway and lorry journeys and is easy to display. The second photo shows a Hartmann tray over-wrapped with cellulose acetate by British Celanese, heat-sealed with a Theco.

We have frequently been asked the questions:—(1) Does prepacking pay? (2) Why do you not supply direct to self-service stores?

The answer to the first question is—Yes—and the reason for our own inability to supply self-service stores direct is lack of continuity on account of our heavy commitments of local sales of mushrooms in standard chips.

The next obvious step was to try to form a Co-operative mushroom pre-packing station but this has not materialized partly owing to lack of interest but mainly owing to transport difficulties. We are very favourably placed for distribution to London, 23 miles, but other interested growers live rather far afield. We have still not given up the idea and have built a modern packing shed which could cope with considerable quantities of prepacked mushrooms and soft fruit.

Apart from the London market there is an increasing demand for prepacked mushrooms and we send to Hull, Chepstow, Cardiff, Jersey and local stalls.

We do however feel very strongly that the time has come for growers to get together and start prepacking before more middlemen step in and do it for them, probably rather badly as the mushrooms will receive double handling. Unless we growers can form Co-operative stations and deliver direct to self-service stores, we must adopt a *standard* $\frac{1}{4}$ lb. pack and outer container with a view to supplying wholesale markets direct in the same way as we send our normal chips. The reduction in cost for large quantities of materials is considerable.

There are four essentials:—

- (a) The mushrooms must be of first-class quality.
- (b) The pack must be attractive.

- (c) The correct film must be used.
- (d) The outer container must be strong and easy to handle and display.

Growers can produce (a) and my photographs may well be the answer to (b), (c) and (d) though personally I would rather see a blue Hartmann tray as it shows up the mushrooms better than the standard white pattern.



Hartmann Fibre Prepacks in Outer Container

The most recent statistics available from P.P.D.A. show that only 100 tons of mushrooms are at present prepacked annually out of a total production of approximately 20,000 tons, i.e., less than a half per cent. Our own figures are approximately 10% of our total production, and would probably be around 25% but for our large local commitments. These figures show the enormous potential markets available for prepacks. Furthermore self-service stores are perhaps the best means of displaying mushrooms and bringing them to the view of *new* customers.

A concerted effort by growers to supply this new retail market would undoubtedly help to raise the price of our product generally and even the most conservative of market salesmen would have to take on prepacks if self-service and chain stores start asking for them. This method would be of great advantage to the small and medium growers who may not be able to produce continuity by themselves.

In these days of rising costs and static prices for horticultural growers, we strongly urge that growers cannot afford to fail to enter a new market where the door is wide open, and the sooner the better before others shut it firmly.

EDITOR'S NOTE—The Bowater-Eburite research work on containers, referred to on page 46, was initiated and guided by Fred. C. Atkins.

SAFETY REGULATIONS AFFECTING YOU

*By James Reedy**

In recent weeks a number of farmers and farm workers have been prosecuted for offences against the Agriculture (Safety, Health and Welfare Provisions) Act, 1956. Do you know the safety regulations which have been made under this Act and how they affect you? Here is

Continued on page 52

YOU CAN RELY ON— **MOUNT SPAWN**



The Grower of this crop says—

The first flush yielded 96 lbs. per sq. ft., all picked within three days, and the second 57 lbs. per sq. ft. The total of the two flushes was picked within fourteen days and the yield was 153 lbs. per sq. ft.

We use only synthetic composts here and these are prepared from wheat straw, activated with a MRA formula which you supply. The composting is done with the aid of a Hawkomatic Compost Maker, and with this machine we are able to control exactly the amount of water introduced and also to ensure a very even spread of activator on the straw. We believe both factors to be of great importance in the preparation of the compost.

We grow on shelf beds and have so far used Mount Spawn in all our crops but one. Another example of a recent good crop was 275 lbs. per sq. ft. in ten weeks.

Extract of recent letter received.

SOLE DISTRIBUTORS :

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a brief summary of some of those in operation and likely to come into operation in the near future.

First Aid: Every farm or horticultural holding on which labour is employed must have at least one first-aid box containing the items specified in the Agricultural (First Aid) Regulations, 1957. The box must be marked 'First Aid' and be kept in a place easily accessible to the workers. If you have 11 to 40 workers you require two boxes; 41 to 70 workers, three boxes; and over 70 workers, four boxes.

Ladders: Under the Ladders Regulation the employer must ensure that the ladders used by workers are well constructed, of sound material and properly maintained. The grain in the rungs must run lengthwise without any visible weakening defects. Rungs of wooden stiled ladders must not be supported only by nails or screws but must be fitted into the side posts or stiles by rabbet, notch, or mortise and metal tie rods must be fitted not more than 2 feet from each end of the ladder and not more than 8 feet apart throughout its length. Metal tie rods however, are not necessary if the rungs are through-tenoned and wedged in the stiles. Steps or trestle ladders must be fitted with an effective device to prevent the back support from spreading and, except for trestle ladders, the distance between adjacent rungs must not be more than 12 inches. The employer and the worker share the responsibility to see that the ladder is properly used. They must ensure that it is strong enough for its purpose, that it has no missing rung, that when it is in place it is equally supported on each stile and is securely placed or held in position. The top of the ladder must extend beyond the point on which the worker is to get off it unless there is some other secure handhold available. The worker must inform his employer immediately if he finds that any ladder he has to use is defective.

Power Take-Offs: Before you buy a new tractor or a new machine make sure that there is a guard fitted to the power take-off stub on the tractor and to the power take-off shaft on the machine. From 1st August, 1958, employers and workers are liable to a fine of up to £50 if a new tractor, or an existing one designed to be fitted with a shield, is used without this protection. If, however, the tractor is an old one not adapted to take a shield to the p.t.o. stub, you must, if you employ workers on the farm, have it adapted and fitted with a p.t.o. shield by 1st August, 1959.

Children: It is illegal for a child under 13 to drive or ride on an agricultural tractor or machine. Nor must they drive jeep-type vehicles on the farm, although they may ride in them. There are conditions with regard to children riding on trailers. Penalties can be severe. The leaflet, "Avoidance of Accidents to Children" explains the details in simple terms.

Heavy Weights: There are, as yet, no general regulations covering the weight of sacks. But the Agriculture (Safety, Health and Welfare Provisions) Act, 1956, has a special section protecting workers under 18 years of age. It is an offence to cause or permit a young worker to lift, carry or move, any weight which is so heavy as to be likely to injure him. Have you made sure this is known on your farm?

MALATHION 60

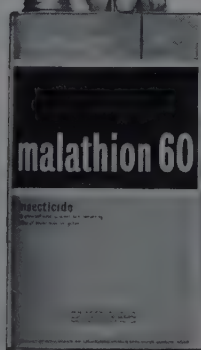
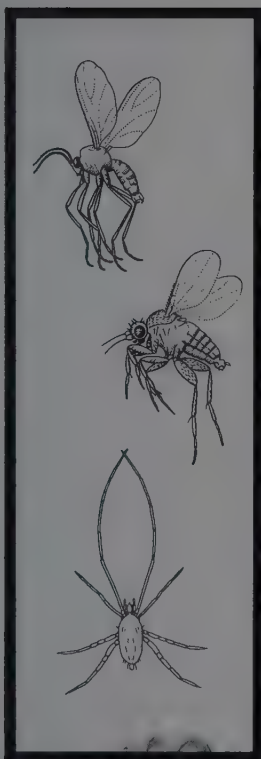
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sciarids, phorids, mites

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MALATHION 60 does not taint and, though it is deadly to mushroom pests, it is so safe to use that you need no protective clothing *even when mixing the concentrate.*

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Safeguarding of Workplaces: Proposals for regulations to safeguard workplaces, floors, staircases and so forth are before Parliament as this article is written. Their requirements cover the construction and maintenance of floors and stairways, provision of handrails on the open sides of the stairs and the guarding of openings in floors, walls, edges of floors, grain pits and stokeholds from which a worker is liable to fall more than 5 feet.

These regulations, if approved, are not likely to come into operation before the 1st April, 1961.

In a short article of this nature it is impossible to give full details of each regulation but here is a practical suggestion. Ask your MGA or the Ministry of Agriculture to send you a complete set of their explanatory notes to the Safety Regulations made under the Agriculture (Safety, Health and Welfare Provisions) Act, 1956. At the same time ask them to let you have a copy of an excellent leaflet "Take Care when you Spray". Clip these together or keep them in a small file adding new leaflets as additional regulations are made. You will then have a complete easy to read guide to the safety requirements on your farm. If you want a large card poster which sets out the Childrens Safety Regulations in simple language so that your workers can be fully informed of them, your MGA Secretary will be pleased to let you have one or more free of charge.

But whatever you do, make sure you know the safety regulations that apply to your farm. Ignorance is no defence in law. Don't be sorry, be safe and be sure!

Note: Mr. James Reedy is Secretary to the NFU Headquarter's Labour Committee and Safety Committee and is a member of the employers' side of the Central Wages Board.



DON'T ALL RUSH!

The Minister of Agriculture announced in the House of Commons on 26th January, that grants to a maximum of £7½m. over five years will be made available to the Horticultural Industry for the cost of buildings and equipment necessary for the preparation of fruit, vegetables and flowers for market. The fund will also provide certain other assistance to smaller businesses growing horticultural crops in the open and for grants to reduce the costs of production of glasshouse produce. The grants will be suitable in approved cases to Co-operative Market Associations of producers as well as to individual producers.

A spokesman for the NFU said, "We are already having discussions with the Government on the application of this fund. The Union does not in any way accept that this grant lessens the Union's case for increased tariffs to protect horticulture and we shall press the Government on this subject."

NOTE: There are 50,000 horticultural businesses in this country and if every horticulturist had an equal share of this fund, it would amount to about £30 per head per year—so don't rush.

GLASSHOUSE CROPS RESEARCH INSTITUTE **—REPORTS**

MGA members who would like to obtain copies of the 1956 and 1957 Annual Reports of the Glasshouse Crops Research Institute may do so on application to The Librarian, Glasshouse Crops Research Institute, Worthing Road, Rustington, Littlehampton.

These reports cost 10/- each.

1959 PUBLICITY FUND CONTRIBUTORS

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†H. Mount & Sons Ltd., Littlebourne, Canterbury.

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	£	s.	d.
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Bradford Fertilizer Co. Ltd., Whitefield Place, Gillington, Bradford	10	10	0
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*Amounts collected by Spawn Merchants are not for publication.

†Previous contributions already acknowledged.

LAST MONTH'S PUBLICITY CONTRIBUTIONS

Dan Wuille & Co. Ltd., Covent Garden Market, W.C.2	100	0	0
Francis Nicholls Ltd., Smithfield Market, Birmingham	157	10	0
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C. W. Tooley & Son Ltd., Salesmen, Nottingham	2	2	0
Geo. Jackson & Co. Ltd., Smithfield Market, Birmingham	50	0	0
Ed. H. Lewis & Sons Ltd., Covent Garden Market, W.C.2	5	5	0
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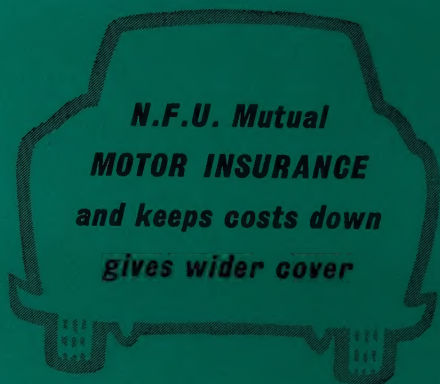
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